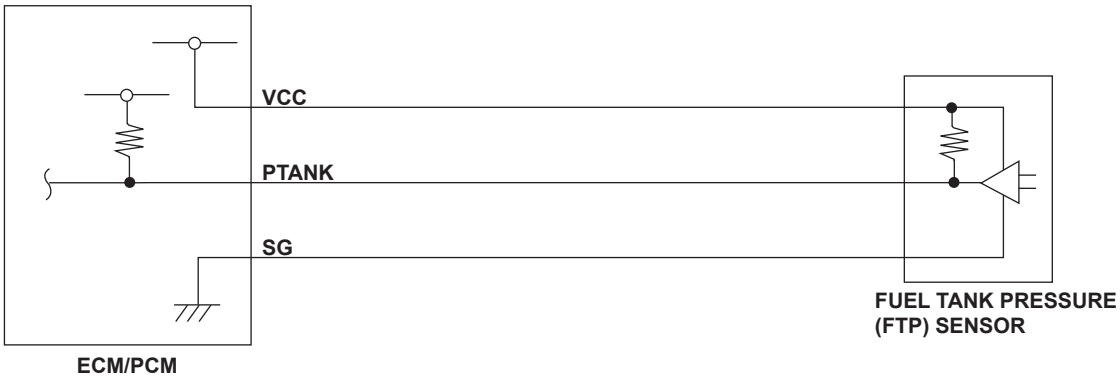
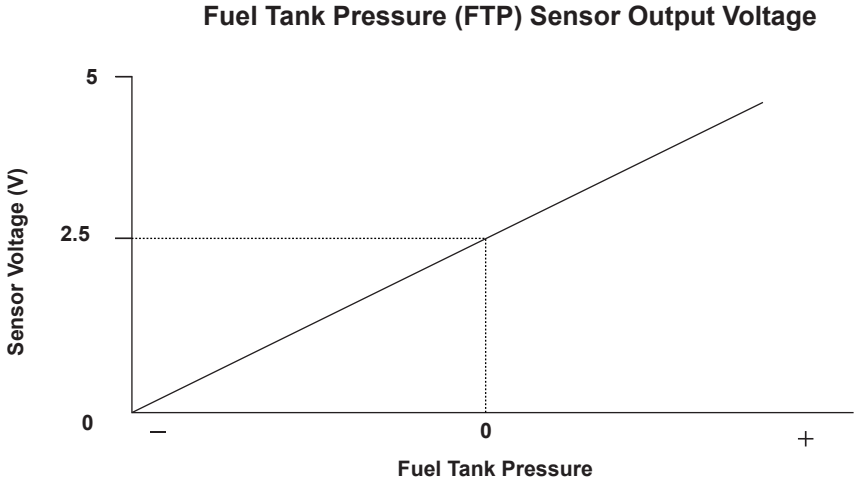
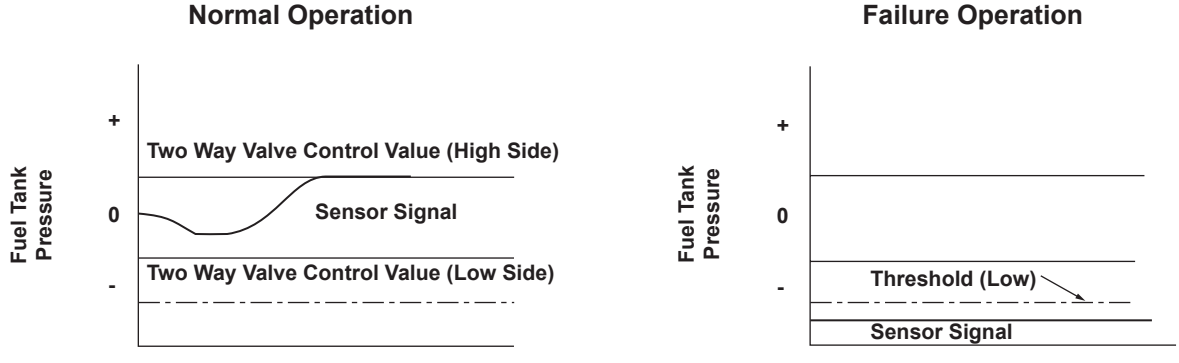
DTC P0452: Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage



P0452-9601



P0452-9672



P0452-9671

General Description

The fuel tank pressure (FTP) sensor is installed between the evaporative emission (EVAP) two way valve and the EVAP bypass solenoid valve. The FTP sensor is used to detect leaks in the EVAP system.
The engine control module (ECM)/powertrain control module (PCM) monitors the FTP sensor output voltage. The FTP sensor output voltage rises as the fuel tank pressure increases. Conversely, the FTP sensor output voltage drops as the fuel tank pressure decreases. If the FTP sensor output voltage does not reach a target value within a set time after starting the engine in a cold condition, the ECM/PCM detects a malfunction and stores a DTC.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Once per driving cycle
Sequence	None
Duration	5 seconds or more
DTC Type	Two drive cycles, MIL ON

Enable Conditions

Condition	Minimum	Maximum
Elapsed time after starting the engine	2 seconds	—
Initial engine coolant temperature	—	95ºF (35ºC)
No active DTCs	ECM/PCM*1, ECT	

*1: F23A1, F23A5 engines

Malfunction Threshold

The output from the fuel tank pressure sensor is less than -7 kPa (- 55 mmHg, -2.1 in.Hg) for at least 5 seconds.

Driving Pattern

Start the engine at an engine coolant temperature as specified under Enable Conditions, and let it idle.

Diagnosis Details

Conditions for illuminating the MIL
When a malfunction is detected during the first drive cycle with the ECT at engine start-up within the specified temperature range, a Temporary DTC is stored in the ECM/PCM memory. If the malfunction recurs during the next (second) drive cycle with the ECT at engine start-up within the specified temperature range, the MIL comes on and the DTC and the freeze frame data are stored.

Conditions for clearing the MIL
The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs.
The MIL, the DTC, the Temporary DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.